ABSTRACT

A flow tube ~~(3)~~ composed of a bent tube having a shape symmetrical with respect to a first axis is supported at its both ends by support portions ~~(8, 8)~~ having an outlet and inlet respectively. A drive device ~~(4)~~ for alternately driving the flow tube ~~(3)~~ rotationally about a second axis connecting the positions where the flow tube ~~(3)~~ is supported is disposed on the vertical axis of a Coriolis flowmeter ~~(1)~~.

A pair of second drive devices ~~(5, 5)~~ for alternately driving the flow tube ~~(3)~~ rotationally are disposed at positions laterally symmetrical with respect to the drive device ~~(4)~~. The paired second drive devices ~~(5, 5)~~ are driven in phase; the drive device ~~(4)~~ is driven with the opposite phase to those of the second drive devices ~~(5, 5)~~. A pair of vibration detecting sensors ~~(6, 6)~~ are disposed between the drive device ~~(4)~~ and one of the second drive device ~~(5)~~ and between the drive device ~~(4)~~ and the other ~~(5)~~ respectively. The sensors ~~(6, 6)~~ detect vibrations with phases the difference between which is in proportion to the Coriolis force acting on the flow tube ~~(3)~~ disposed laterally symmertrically with respect to the drive device ~~(4)~~.